a supply of said first impurity raw material is started in synchronous with starting a supply of said first crystal raw material, a supply of said second impurity raw material is started after finishing the supply of said first impurity raw material, and the supply of said second impurity raw material is finished before starting the supply of said second crystal raw material.

5. (Amended) An impurity doping method for semiconductor as claimed in claim 28 wherein:

there is a period of time wherein said first impurity raw material is supplied with said second impurity raw material at the same time.

6. (Amended) An impurity doping method for semiconductor as claimed in claim 26 wherein:

a crystal raw material supplied precedently within said one cycle in said crystal raw materials is at least one member selected from the group consisting of Ga, Al, In, B, Zn, and Cd, while a crystal raw material is supplied latterly within said one cycle is at least one member selected from the group consisting of N, As, P, S, Se, and Te.

7. (Amended) An impurity doping method for semiconductor as claimed in claim 27 wherein:

a crystal raw material supplied precedently within said one cycle in said crystal raw materials is at least one member selected from the group consisting of Ga, Al, In, B, Zn,

and Cd, while a crystal raw material supplied latterly within said one cycle is at least one member selected from the group consisting of N, As, P, S, Se and Te.

8. (Amended) An impurity doping method for semiconductor as claimed in claim 28 wherein:

a crystal raw material supplied precedently within said one cycle in said crystal raw materials is at least one member selected from the group consisting of Ga, Al, In, B, Zn and Cd, while a crystal raw material supplied latterly within said one cycle is at least one member selected from the group consisting of N, As, P, S, Se and Te.

11. (Amended) An impurity doping method for semiconductor as claimed in claim 26, wherein:

said impurity raw materials are a p-type impurity raw material and an n-type impurity raw material.

12. (Amended) An impurity doping method for semiconductor as claimed in claim 27, wherein:

said impurity raw materials are a p-type impurity raw material and an n-type impurity raw material.

13. (Amended) An impurity doping method for semiconductor as claimed in claim 28, wherein:

said impurity raw materials are a p-type impurity raw material and an n-type impurity raw material.

21. (Amended) An impurity doping method for semiconductor wherein a crystal layer made of crystal raw materials is doped with impurities, comprising:

a cycle composed of:

a first step wherein a supply of trimethylgallium (TMGa) and biscyclopentadienyl magnesium ($(Cp)_2Mg$) is started at a first timing, and the supply of TMGa and $(Cp)_2Mg$ is finished at a second timing at which the supply TMGa and $(Cp)_2Mg$ for a predetermined period of time was completed;

a second step wherein a supply of tetraethylsilane (TESi) is started either immediately after, or after the second timing at which the supply of TMGa and $(Cp)_2Mg$ was finished, and the supply of TESi is finished at a third timing at which the supply of TESi for a predetermined period of time was completed;

a third step wherein a supply of ammonia (NH_3) is started either immediately after, or after the third timing at which the supply of TESi is finished, and the supply of NH_3 is finished at a fourth timing at which the supply of NH_3 for a predetermined period of time was completed; and

a fourth step wherein a purge time is started after the supply of NH_3 is finished at the fourth timing at which the supply of NH_3 was completed, and said purge time is finished at a fifth timing;

wherein an impurity pair is formed in said crystal layer;

said first through fourth steps being repeated a desired number of times.

Please add claims 26-28 as follows:

--26. An impurity doping method for semiconductor wherein a crystal layer made of crystal raw materials is doped with impurities, comprising:

supplying as one cycle each of said crystal raw materials, one at a time and separated by a purge time; and

supplying each of plural types of impurity raw materials for a given time, where the given time for supplying each of the impurity raw materials are close to each other;

wherein said plural types of impurity raw materials form impurity pairs within at least one of said crystal raw materials.

27. An impurity doping method for semiconductor wherein a crystal layer made of said plural types of crystal raw materials is doped with impurities, comprising:

supplying as one cycle each of said plural types of crystal raw materials, one at a time and separated by a purge time; and

supplying each of plural types of impurity raw materials for a given time, wherein said given times either are at the same time of or after the start of supplying one of said crystal raw materials as well as before starting the supply of other of said crystal raw materials;

wherein said plural types of impurity raw materials form impurity pairs within at least one of said crystal raw materials.

28. An impurity doping method for semiconductor wherein a crystal layer made of said plural types of crystal raw materials is doped with impurities comprising:

alternately supplying as a single cycle first and second crystal raw materials with purge times between the supply of the first crystal raw material and the supply of the second crystal raw material;

supplying a first impurity raw material and a second impurity raw material at given times which are close to one another and either at the same time of or after the start of supplying of said first crystal raw material as well as before starting the supply of said second crystal raw material;

wherein said plural types of impurity raw materials form impurity pairs within at least one of said crystal raw materials.